

## ROUTING AND RECORD SHEET

SUBJECT: (Optional)

ISB Field Trip - 19-20 May 1988

FROM:

SA/EXDIR  
7E12 HQS

EXTENSION

NO.

ER 1671-88

DATE

22 April 1988

TO: (Officer designation, room number, and building)

DATE

RECEIVED

FORWARDED

OFFICER'S  
INITIALS

COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)

1. ER (File B-209-IR)  
7E12 HQS

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

DCI  
EXEC  
REG

B-209-11

**Page Denied**

Next 1 Page(s) In Document Denied

# SMALL COMPUTER SYSTEMS

File: Companies  
C-908-653.1  
Date: March 17, 1988

Title: Wang Paid a Price for Profitability in 1987

Summary: Wang gets mixed reviews in meeting critical objectives during 1987 for profit, product, competitive offerings and company image. Signs of improvement exist, but 1988 objectives must be the same.

**Key Issue:** Has Wang lost key strategic initiatives during efforts to return to profitability?

Figure I

Wang Revenue/Income (\$ in Millions)						
	1Q87	2Q87	3Q87	4Q87	1987	1986
Rev.	745.9	824.0	693.0	784.7	3,047.6	2,668.9
Net Inc.	5.9	32.0	22.5	34.1	94.5	(86.3)

Profitability was, we believe, one of Wang Laboratories' key objectives in 1987. The company barely met that objective (see Figure I), although the quarterly trend was positive -- a sign of important controls and disciplines coming into play. The positive profit trend may have resulted in part from tough management decisions to pare back resources and accept the embarrassment of more product delays.

Users have mixed reactions to Wang's sales and product service and support. Most of our large corporate clients are negative, but we are hearing of customers (some new to Wang) impressed with the attention from Wang representatives and the company's service and support. For many large users, only a sustained period of above average service and sales will reverse a negative image. In some cases, that reverse may never come, or will be moot, as companies focus on a shorter and "Wang-less" preferred vendor list. But there are signs that Wang is working hard and, at least in some areas, successfully to become a more responsive and reliable vendor. That effort to improve has been especially difficult during a time of concentration on expense control and profit improvement. Any positive change, therefore, must be regarded as a sign of progress.

Figure II

Wang's VS Product Family		
Model	"MIPS"	Intro. Date
7310	2.0	1/87
7150	2.0	1/87
7120	1.5	1/87
7110	1.1	1/87
7010	1.1	10/87
75E	0.8	10/87
6E	0.7	10/87
5E	0.5	10/87
300	2.0	3/84
100	1.1	12/80
85	0.8	6/83
65	0.7	12/84
15	0.4	6/84

On the product side, Wang has held its own, despite few glimmers of brilliance. Wang announced and began shipping in 1987 VS models that virtually replace existing models. The new models do not span any broader performance range (see Figure II), but offer significantly better profit margins (we believe about 60 percent, compared to about 40 percent for older products). Although Wang was late relative to its competition in getting this newer technology to market, the VS line contributed to better financial results for Wang, and improved price/performance for users.

Wang did not meet its stated goals at the high end of the VS product line. In January 1987 (see Figure III, reverse), the company described an intended 7320 dual symmetric processor with shipment anticipated for the

GARTNER GROUP, INC.

SMALL COMPUTER SYSTEMS is published by Gartner Group, Inc. Reprints of this document are available. Reprint prices are available upon request. Entire contents © 1988 Gartner Group, Inc. 56 Top Gallant Road, P.O. Box 10212, Stamford, CT 06904-2212. Telephone: (203)964-0096. Facsimile: (203)324-7901. Telex: 643528. This publication may not be reproduced in any form or by an electronic or mechanical means including information storage and retrieval systems without prior written permission. All rights reserved.

fourth quarter. It formally announced the 7320 on Dec. 28, but with an intended availability of 3Q88 -- nine months late. Wang may have pulled resources from the 7320 effort during a lean 1987, but we believe a greater factor was the technical problem of efficiently supporting a symmetric processor configuration, a problem with which DEC, Data General and Prime also struggled. We suspect that Wang underestimated the complexity of the product, but could not afford to increase the resource commitment.

Figure III

Wang 1987 Announcements	
Jan. 29	VS 7310, 7150, 7120, 7110 processors 7320 intention; RSF intention
Apr. 4	Wang Integrated Image Systems (WIIS)
Aug. 25	Intention for Pansophic Panvalet on Wang VS
Sept. 22	Ethernet (802.3) phase 1 product; TCP/IP intention
Sept. 29	Development and marketing agreement with Software AG for Pace (VS) connect to S/370 mainframe files (Adabas, VSAM, DL/1, Sequential). (No product or delivery announced.)
Oct. 19	VS 5E, 6E, 75E, 7010 processors
Dec. 1	VS/VM software supporting concurrent VS OS and IN/ix (Unix) execution
Dec. 15	InterOffice software to connect Wang Office to DEC All-in-1 office systems
Dec. 28	VS 7320 processor, deliverable in 3Q88

Wang also announced in January 1987 its intention to offer a VS Resource Sharing Facility (RSF) with up to four CPUs connected via high-speed cabling for single-image file and device sharing. This is Wang's equivalent of DEC's VAXcluster, but without a HSC-like (Hierarchical Storage Controller) storage processor. Wang was to announce delivery dates by the end of 1987, but did not. Again, we believe the task has proven more difficult than Wang anticipated, and/or resources were pulled back.

On the software side, Wang's VS/VM software (announced on Dec. 1) enables concurrent execution of VS OS and IN/ix (Wang's Unix V.2 implementation developed by Interactive Systems Corp.). This is a full year after IN/ix was offered with VS OS on only a VS 85 or VS 100. We believe VS/VM might appeal to a limited set of users (converting from a VS to a competitor's native Unix is one unfortunate possibility). It also comes at a time when competitors are moving toward native implementations of Unix on their hardware platforms for performance reasons and giving much more than lip service to their Unix products.

Wang is now shipping much needed high-margin VS products, and is, we believe, stabilizing the negative spiral in its service and support reputation. We think these factors will remain critical in 1988, especially in Wang's efforts to retain its customer base. Wang is not likely ever to be a leader in high-performance processors or in implementing the growing set of industry standards. We believe it must commit to coexistence with IBM, DEC and industry standards as it focuses on niche specialties, including its products' ease of use for offices, its efforts in imaging (WIIS), and the potential of its remote systems support. Corporate MIS organizations may not soon embrace Wang as a general-purpose vendor, but the company must have at least tacit MIS approval while selling to departments needing its specialties.